EXCEPTION

Date: September 21, 2000

EXCEPTION REPORT

An exception has been identified as a result of the test activities associated with the process verification review for Interface Development (PPR 5).

Exception:

BellSouth lacks an appropriate process, methodology and robust test environment for testing of the electronic data interchange (EDI) interface.

Background:

The first step for a CLEC planning to execute transactions on BellSouth's EDI production systems is for the CLEC to develop an EDI software interface. To accomplish this, the CLEC follows BellSouth's EDI interface development process which includes acquiring specifications and following a test plan that will lead to certified connectivity with BellSouth's EDI production systems. Once certified, the CLEC can execute customer transactions with BellSouth.

To facilitate market entry by a CLEC, BellSouth should make available a robust test environment for the EDI interface.

Issue:

CLECs that seek to test the EDI machine to machine interface during the establishment of system connectivity do not have an adequate test environment available.

BellSouth's current EDI test environment does not offer the functionality to enable a CLEC to thoroughly test its EDI interface prior to connecting to BellSouth's production systems. Some of the elements KPMG Consulting would expect BellSouth's EDI test environment and test processes to include are:

- Ability for a CLEC to create valid electronic test transactions that will process completely through BellSouth's ordering, billing and provisioning systems. In BellSouth's existing process, when a CLEC sends test transactions to BellSouth's test environment the transactions are not processed by either billing or provisioning systems. The only system generated confirmation is a Firm Order Confirmation (FOC), which indicates simply that an order was received and processed through the ordering system. The CLEC is not notified of the test transaction's success or failure by BellSouth's EDI systems directly. In a production environment, a Billing Completion Notice [BCN] and Provisioning Completion Notice [PCN] are system generated upon successful processing.

Current BellSouth testing methodology does not allow a CLEC to ensure that the test transactions generated by a CLECs EDI system can be processed end-to-end by BellSouth systems successfully upon reaching the production environment.

- BellSouth test cases with expected input and output data that will facilitate the CLEC's ability to validate a developed EDI interface before and after connecting to BellSouth's test or production environment. All BellSouth test cases should be of sufficient breadth and depth to allow a CLEC to robustly and thoroughly test all facets of its EDI interface to ensure it has met BellSouth specifications.

- Consistent and documented process for creation of CLEC specific test cases. A CLEC should have the ability to develop an overall test approach or plan that is consistent with its intended business model.

- Documented test processes and expected timelines. A CLEC should have access to information outlining the entire process prior to commencing development for business planning purposes.

- CLECs that have already entered the market require consistent and documented processes, timelines, and a test environment that will permit them to test new changes or releases prior to their introduction into the production environment. As changes are made to BellSouth's EDI systems (e.g., software, specifications, business rules, etc.) that require a CLEC to upgrade its own EDI interface to continue to be able to conduct transactions, the test environment should be updated in a controlled fashion that will permit a CLEC to test these system changes before they are used with live data or on production systems. The CLEC should be provided with reasonable notification.

Impact

Due to deficiencies in the current EDI test environment, CLECs have difficulty in developing defect free interfaces . This has an impact on a CLECs ability to develop and deliver uninterrupted service to its customers.

FLORIDA OSS BELLSOUTH RESPONSE TO EXCEPTION 6

BELLSOUTH

FLORIDA OSS
Exception #6
October 16, 2000

EXCEPTION REPORT

An exception has been identified as a result of the test activities associated with the process verification review for Interface Development (PPR 5).

Exception:

BellSouth lacks an appropriate process, methodology and robust test environment for testing of the electronic data interchange (EDI) interface.

Background:

The first step for a CLEC planning to execute transactions on BellSouth's EDI production systems is for the CLEC to develop an EDI software interface. To accomplish this, the CLEC follows BellSouth's EDI interface development process, which includes acquiring specifications and following a test plan that will lead to certified connectivity with BellSouth's EDI production systems. Once certified, the CLEC can execute customer transactions with BellSouth.

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Issue:

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ordering system. The CLEC is not notified of the test transaction's success or failure by BellSouth's EDI systems directly. In a production environment, a Billing Completion Notice [BCN] and Provisioning Completion Notice [PCN] are system generated upon successful processing.

Current BellSouth testing methodology does not allow a CLEC to ensure that the test transactions generated by a CLECs EDI system can be processed end-to-end by BellSouth systems successfully upon reaching the production environment.

- BellSouth test cases with expected input and output data that will facilitate the CLEC's ability to validate a developed EDI interface before and after connecting to BellSouth's test or production environment. All BellSouth test cases should be of sufficient breadth and depth to allow a CLEC to robustly and thoroughly test all facets of its EDI interface to ensure it has met BellSouth specifications.

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Impact

Due to deficiencies in the current EDI test environment, CLECs have difficulty in developing defect free interfaces. This has an impact on a CLECs ability to develop and deliver.

BellSouth Response:
Attached are two drawings that depict the current and future (NEW.PPT) EDI production and test environments. The drawing in file EDICR.PPT illustrates the current EDI environment where testing is differentiated from production by IP address, dataset names, OCN, map, etc. as those elements are defined in the EDI test and production profiles for each trading partner. The test/production flag on individual requests provide further differentiation.

FLORIDA OSS BELLSOUTH RESPONSE TO EXCEPTION 6

The drawing in file NEW.PPT illustrates the new EDI infrastructure to which BellSouth is migrating. The targeted migration date is December 1, 2000. Some upgrade activities will take place between December 1, 2000 through June 30, 2001. In the new EDI infrastructure a completely separate site is provided for CLEC testing. Access to the CLEC Test Site will be governed by the dataset names and the profile that will be established when the CLEC submits a request to utilize the test site and a CLEC Test Agreement is negotiated.

As part of the CLEC Test Agreement negotiations BellSouth requests a copy of the test scenarios from the individual CLEC in order to insure that the functions being tested are valid and are within the scope of the test. Often CLECs will provide their actual field input, which allows early detection of problems that would occur in both the test and production modes. A CLEC Test Agreement with a schedule is negotiated prior to the commencement of testing.

During testing a FOC is sent to the CLEC on a test request **only** when a satisfactory service order is generated in BellSouth's Service Order Communications System. A Completion Notice is sent **only** when the sufficient information is provided on the service order to insure proper installation of the product or service. Under special circumstances, such as xDSL/UCL Beta Testing, are requests allowed to advance and actually install, generating a bill to the CLEC.

EDI comprises **a portion** of the new CLEC Test Environment, which includes other interfaces as well, e.g. TAG and LENS. Actual provisioning and billing will not be a part of the initial implementation of the new CLEC Test Environment.

FLORIDA OSS BELLSOUTH'S AMENDED RESPONSE TO EXCEPTION 6

BELLSOUTH

Florida OSS Test
Amended Exception #6

December 5, 2000

EXCEPTION REPORT

An exception has been identified as a result of the test activities associated with the process verification review for Interface Development (PPR 5).

Exception:

BellSouth lacks an appropriate process, methodology and robust test environment for testing of the electronic data interchange (EDI) interface.

Background:

The first step for a CLEC planning to execute transactions on BellSouth's EDI production systems is for the CLEC to develop an EDI software interface. To accomplish this, the CLEC follows BellSouth's EDI interface development process which includes acquiring specifications and following a test plan that will lead to certified connectivity with BellSouth's EDI production systems. Once certified, the CLEC can execute customer transactions with BellSouth.

To facilitate market entry by a CLEC, BellSouth should make available a robust test environment for the EDI interface.

Issue:

CLECs that seek to test the EDI machine to machine interface during the establishment of system connectivity do not have an adequate test environment available.

BellSouth's current EDI test environment does not offer the functionality to enable a CLEC to thoroughly test its EDI interface prior to connecting to BellSouth's production systems. Some of the elements KPMG Consulting would expect BellSouth's EDI test environment and test processes to include are:

- Ability for a CLEC to create valid electronic test transactions that will process completely through BellSouth's ordering, billing and provisioning systems. In BellSouth's existing process, when a CLEC sends test transactions to BellSouth's test environment the transactions are not processed by either billing or provisioning systems. The only system generated confirmation is a Firm Order Confirmation (FOC), which indicates simply that an order was received and processed through the ordering system. The CLEC is not notified of the test transaction's success or failure

by BellSouth's EDI systems directly. In a production environment, a Billing Completion Notice [BCN] and Provisioning Completion Notice [PCN] are system generated upon successful processing.

Current BellSouth testing methodology does not allow a CLEC to ensure that the test transactions generated by a CLECs EDI system can be processed end-to-end by BellSouth systems successfully upon reaching the production environment.

- BellSouth test cases with expected input and output data that will facilitate the CLEC's ability to validate a developed EDI interface before and after connecting to BellSouth's test or production environment. All BellSouth test cases should be of sufficient breadth and depth to allow a CLEC to robustly and thoroughly test all facets of its EDI interface to ensure it has met BellSouth specifications.

- Consistent and documented process for creation of CLEC specific test cases. A CLEC should have the ability to develop an overall test approach or plan that is consistent with its intended business model.

- Documented test processes and expected timelines. A CLEC should have access to information outlining the entire process prior to commencing development for business planning purposes.

- CLECs that have already entered the market require consistent and documented processes, timelines, and a test environment that will permit them to test new changes or releases prior to their introduction into the production environment. As changes are made to BellSouth's EDI systems (e.g., software, specifications, business rules, etc.) that require a CLEC to upgrade its own EDI interface to continue to be able to conduct transactions, the test environment should be updated in a controlled fashion that will permit a CLEC to test these system changes before they are used with live data or on production systems. The CLEC should be provided with reasonable notification.

Amendment—In response to the BellSouth request for more detail regarding the proposed EDI test environment, KPMG Consulting agreed to develop a more detailed description of the types of elements typically found in the test environment. KPMG Consulting would expect, at a minimum, the following elements to be included in a comprehensive EDI test environment:

1. Detailed description of the complete functionality and operation of the proposed EDI test environment (down to the computer system level).
2. Capacity and availability of the proposed EDI test environment.
3. Computing and network architecture of the proposed EDI test environment.
4. Types and version of software to be used in the proposed EDI test environment.
5. Standard template or process for developing a CLEC Test Agreement.
6. Documented process for developing a CLEC EDI interface test plan.

FLORIDA OSS BELLSOUTH'S AMENDED RESPONSE TO EXCEPTION 6

7. CLEC requirements for connecting to the proposed EDI test environment.
8. Documented process for the creation, use, and modification of BellSouth and CLEC test data. Complete test cases would include expected outputs.
9. Detailed flow of events for submitted test transactions, including the types of messaging (automated and manual) that will be exchanged between the CLEC EDI interface and the proposed BellSouth EDI test environment.
10. Documented process that guides a new CLEC EDI trading partner (i.e., new entrant) through the steps necessary—from initiating the EDI interface development process through to the cutover into a production environment. I.e. an end-to-end view of the EDI interface development/connectivity process.
11. Documented process that guides an existing CLEC EDI trading partner through the necessary steps for a new EDI system release—from connecting to the proposed EDI test environment to developing and testing against the new system release through to the cutover into a production environment. I.e. an end-to-end view of the EDI interface development/connectivity process for a new software release that includes:
    - Intervals.
    - Milestones.
    - Software version control and availability.
    - Testing.
    - Software migration.
12. Quality assurance processes BellSouth would employ to ensure the software in the proposed EDI test environment is equally functional and stable to that in the production environment.
13. Documented process for notifying the CLEC community on events regarding the proposed EDI test environment.
14. Process for providing support to a CLEC operating in the proposed EDI test environment, including the ability to report, track, and escalate issues.

Impact

Due to deficiencies in the current EDI test environment, CLECs have difficulty in developing defect free interfaces . This has an impact on a CLECs ability to develop and deliver uninterrupted service to its customers.

FLORIDA OSS BELLSOUTH'S AMENDED RESPONSE TO EXCEPTION 6

Bell South Response to Amendment

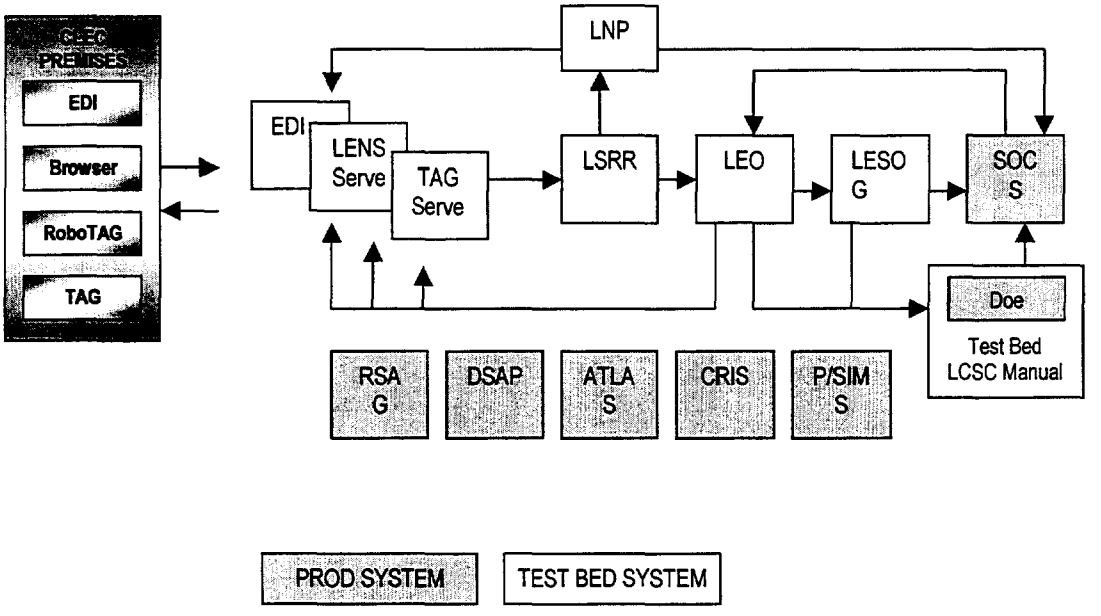
1. Detailed description of the complete functionality and operation of the proposed EDI test environment (down to the computer system level). _____
   See Question #3.

2. Capacity and availability of the proposed EDI test environment.

   Capacity and availability of the test environment is currently under development. These issues will be addressed in a test agreement/plan that is anticipated to be published on or before 15 Mar 00.

3. Computing and network architecture of the proposed EDI test environment.
   The CLEC test environment is depicted in the picture below. An additional diagram is attached.

CLEC Test



The Scope of this project is to allow the CLEC Community (Trading Partners) to successfully test their applications against new release functionality.

The test environment will include ENCORE Systems (TAG, LEO, LNP, LESOG, and EDI) that will be duplicated to match the ENCORE production systems. The production legacy reference systems (CRIS, PSIMS, CABS, etc.) will be used in this CLEC test environment.

FLORIDA OSS BELLSOUTH'S AMENDED RESPONSE TO EXCEPTION 6

Below is a detailed description of all the systems that will be duplicated in this testing enviroment:

EDI (Electronic Data Interchange) – A BellSouth supported API (Application Programming Interface).

- EDI is a mainframe based system
- EDI provides physical, link, network, transport, and presentation capabilities (OSI Layer) that interface with OSS platforms systems (RSAG,.DSAP, ATLAS, CRIS) for pre-ordering functionalities, and the LSRR (Local Service Request Router) for routing both LNP (Local Number Portability) and NON-LNP traffic.

TAG (Telecommunications Access Gateway) - A BellSouth supported and manufactured API.

- TAG is a server based system
- TAG provides physical, link, network, transport, and presentation capabilities (OSI Layer) that interface with OSS platforms systems (RSAG,.DSAP, ATLAS, CRIS) for pre-ordering functionalities, and the LSRR (Local Service Request Router) for routing both LNP (Local Number Portability) and NON-LNP traffic.

LENS (Local Exchange Navigation Systems) – A BellSouth supported and manufactured API

- LENS is a server based system
- LENS provides both application and presentation (OSI Model) capabilities to TAG for downstream ordering and routing functionalities.

LSRR (Local Service Request Router)- an electronic, traffic routing mechanism

- Routes LNP and NON-LNP traffic via electronic navigator contracts.
- LSRR interfaces with LNP, LEO, and OSS platform systems for subsequent order validation and data storage.

LNP (Local Number Portabilility)- A BellSouth maintained electronic database and order generator

- LNP is a server based system
- Provides both data storage and order generation for all LNP orders initiated by trading partners.

LEO- (Local Exchange Order)- A BellSouth maintained electronic database

- LEO is mainframe based
- LEO provides a robust, electronic data storage for all NON-LNP orders initiated by trading partners.
- LEO interfaces with LESOG by sending data to LESOG.

FLORIDA OSS BELLSOUTH'S AMENDED RESPONSE TO EXCEPTION 6

LESOG (Local Exchange Service Order Generator)

- LESOG is server based
- A mechanized process that generates and assembles orders initiated by trading partners
- LESOG interfaces with SOCS by sending data to SOCS

SOCS (Service Order Confirmation System)

- SOCS is a server based
- Provides a mechanism for electronically confirming the status of orders via a "return feed" to the trading partner. The types of "return feeds" include: Pending Order Status, FOC (Firm Order Completions), Notices, clarifications, and jeopardies.

4. Standard template or process for developing a CLEC Test Agreement.
   A standard template for a CLEC Test Agreement/Plan is currently in use at BellSouth for both beta and normal CLEC testing across the electronic interfaces.
5. Documented process for developing a CLEC EDI interface test plan.
   A standard template for a CLEC Test Agreement/Plan is currently in use at BellSouth for both beta and normal CLEC testing across the electronic interfaces.
6. CLEC requirements for connecting to the proposed EDI test environment.
   CLEC requirements for connecting to the proposed EDI test environment will be negotiated as part of the CLEC Test Agreement/Plan.
7. Documented process for the creation, use, and modification of BellSouth and CLEC test data. Complete test cases would include expected outputs.
   As part of the CLEC Test Agreement/Plan, CLEC test scenarios are negotiated. The test scenarios may dictate use of BellSouth and/or CLEC test data. This determination is a part of the process for final negotiation of the CLEC Test Agreement/Plan.
8. Detailed flow of events for submitted test transactions, including the types of messaging (automated and manual) that will be exchanged between the CLEC EDI interface and the proposed BellSouth EDI test environment.
   The flow of events for test transactions will be automated and will mimic the production environment with respect to the sending of 850/860s and the return of 855/865s. Functional Acknowledgments (997s) will continue to be a required document exchange.
9. Documented process that guides a new CLEC EDI trading partner (i.e., new entrant) through the steps necessary—from initiating the EDI interface development process through to the cutover into a production environment. I.e. an end-to-end view of the EDI interface development/connectivity process.

This reflects the internal procedures a CLEC must follow before entry into production. These procedures are managed, documented, and enforced by a CLEC(s) account representative, and are contained in the BellSouth OSS Connectivity Account Team Procedures document.

10. Documented process that guides an existing CLEC EDI trading partner through the necessary steps for a new EDI system release—from connecting to the proposed EDI test environment to developing and testing against the new system release through to the cutover into a production environment. I.e. an end-to-end view of the EDI interface development/connectivity process for a new software release that includes:
    - Intervals.
    - Milestones.
    - Software version control and availability.
    - Testing.
    - Software migration.

    A documented process that will guide the trading partner from the test environment Into production will be addressed in a test agreement/plan that is anticipated to be published on or before 15 Mar 00.

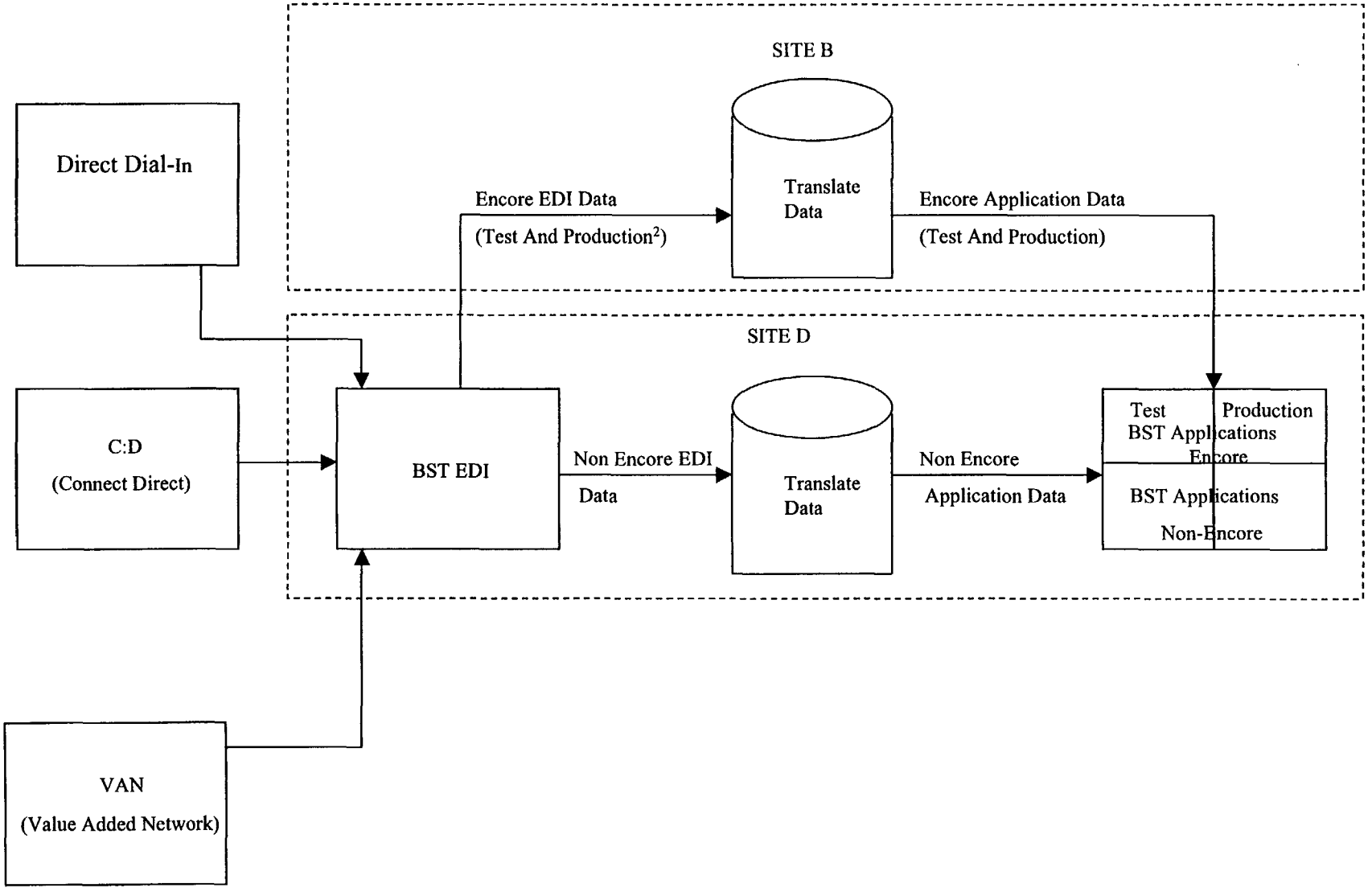
11. Quality assurance processes BellSouth would employ to ensure the software in the proposed EDI test environment is equally functional and stable to that in the production environment.
    An internal quality assurance process is currently under development for the test environment.

12. Documented process for notifying the CLEC community on events regarding the proposed EDI test environment.

    The documented process for notifying CLECs of any events regarding the test environment is be documented and communicated through the CLEC Change Control Process and Carrier Notification letters.

13. Process for providing support to a CLEC operating in the proposed EDI test environment, including the ability to report, track, and escalate issues.
    The process is negotiated and documented in the CLEC Test Agreement/Plan.

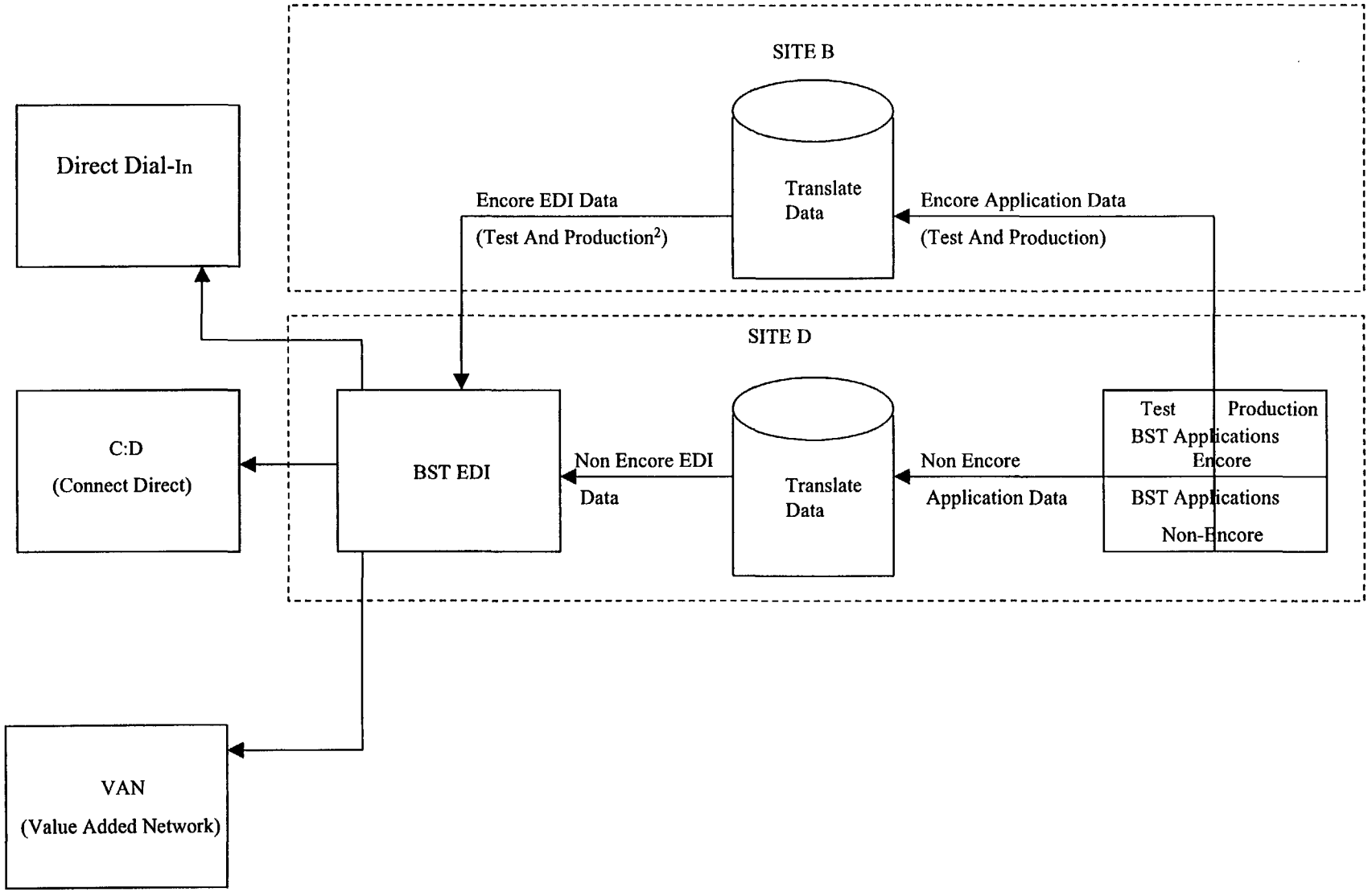
Current Inbound EDI Test and Production[1]



[1] Non-Encore and Encore requests were processed in site D prior 6/00. Differentiation between Test and Production was the same.

[2] Test differentiated from Production by IP address, dataset names, OCN, map, etc. as defined in the EDI test and production profiles for each trading partner. Test/Production flag on individual requests provide further differentiation, as needed.

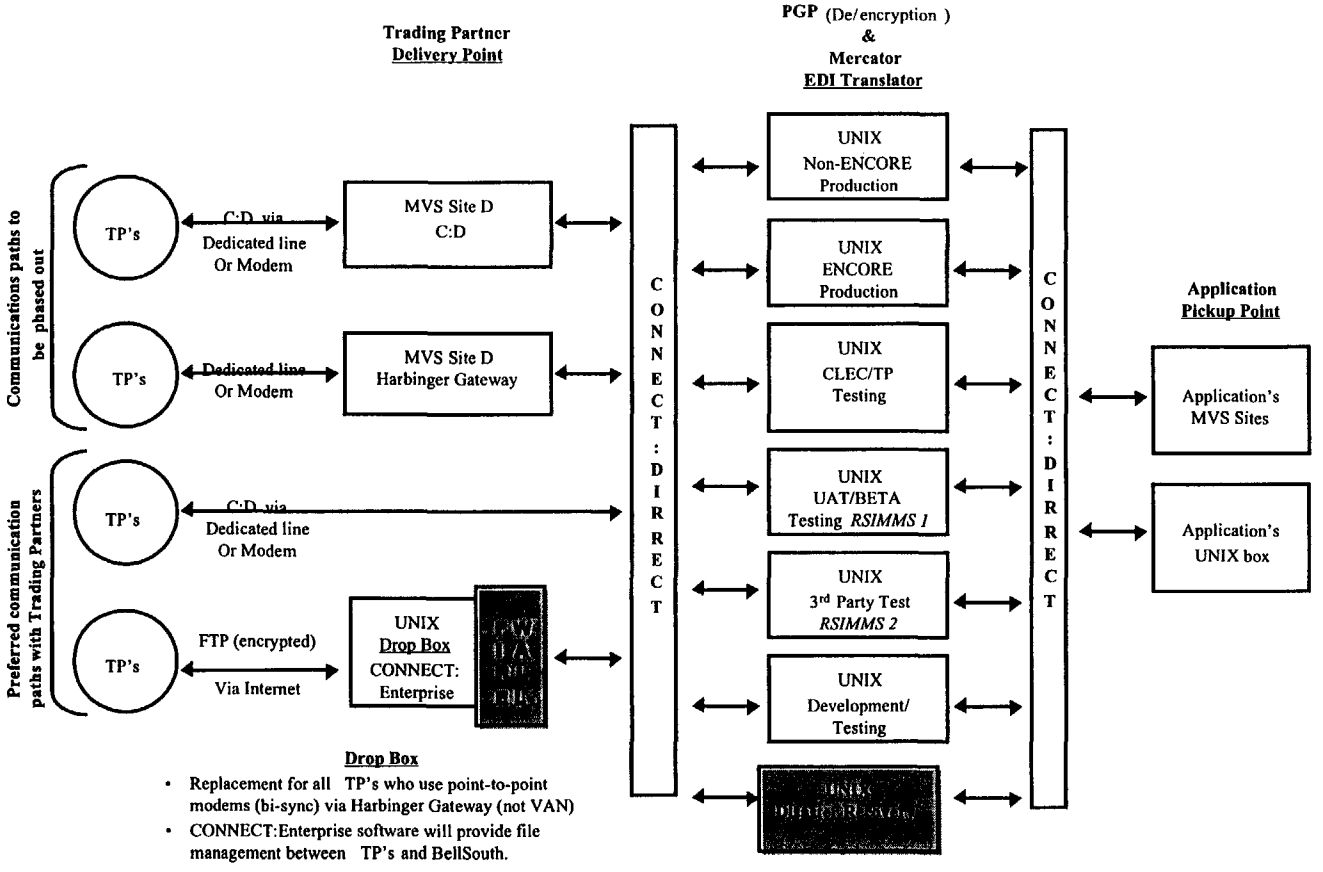
Current Outbound EDI Test and Production[1]



[1] Non-Encore and Encore requests were processed in site D prior 6/00. Differentiation between Test and Production was the same as noted in footnote 2.

[2] Test differentiated from Production by IP address, dataset names, OCN, map, etc. as defined in the EDI test and production profiles for each trading partner. Test/Producti flag on individual requests provide further differentiation, as needed.

New EDI Infrastructure Flow



Drop Box

- Replacement for all TP's who use point-to-point modems (bi-sync) via Harbinger Gateway (not VAN)
- CONNECT:Enterprise software will provide file management between TP's and BellSouth.

FLORIDA OSS BELLSOUTH'S 2ND AMENDED RESPONSE TO EXCEPTION 6

BELLSOUTH

Florida OSS Test
Amended Exception #6

Date: January 9, 2001

EXCEPTION REPORT

An exception has been identified as a result of the test activities associated with the process verification review for Interface Development (PPR 5).

Exception:

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Background:

The first step for a CLEC planning to execute transactions on BellSouth's EDI production systems is for the CLEC to develop an EDI software interface. To accomplish this, the CLEC follows BellSouth's EDI interface development process which includes acquiring specifications and following a test plan that will lead to certified connectivity with BellSouth's EDI production systems. Once certified, the CLEC can execute customer transactions with BellSouth.

To facilitate market entry by a CLEC, BellSouth should make available a robust test environment for the EDI interface.

Issue:

CLECs that seek to test the EDI machine to machine interface during the establishment of system connectivity do not have an adequate test environment available.

BellSouth's current EDI test environment does not offer the functionality to enable a CLEC to thoroughly test its EDI interface prior to connecting to BellSouth's production systems. Some of the elements KPMG Consulting would expect BellSouth's EDI test environment and test processes to include are:

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by BellSouth's EDI systems directly. In a production environment, a Billing Completion Notice [BCN] and Provisioning Completion Notice [PCN] are system generated upon successful processing.

Current BellSouth testing methodology does not allow a CLEC to ensure that the test transactions generated by a CLECs EDI system can be processed end-to-end by BellSouth systems successfully upon reaching the production environment.

- BellSouth test cases with expected input and output data that will facilitate the CLEC's ability to validate a developed EDI interface before and after connecting to BellSouth's test or production environment. All BellSouth test cases should be of sufficient breadth and depth to allow a CLEC to robustly and thoroughly test all facets of its EDI interface to ensure it has met BellSouth specifications.

- Consistent and documented process for creation of CLEC specific test cases. A CLEC should have the ability to develop an overall test approach or plan that is consistent with its intended business model.

- Documented test processes and expected timelines. A CLEC should have access to information outlining the entire process prior to commencing development for business planning purposes.

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3. Computing and network architecture of the proposed EDI test environment.
4. Types and version of software to be used in the proposed EDI test environment.
5. Standard template or process for developing a CLEC Test Agreement.
6. Documented process for developing a CLEC EDI interface test plan.

7. CLEC requirements for connecting to the proposed EDI test environment.
8. Documented process for the creation, use, and modification of BellSouth and CLEC test data. Complete test cases would include expected outputs.
9. Detailed flow of events for submitted test transactions, including the types of messaging (automated and manual) that will be exchanged between the CLEC EDI interface and the proposed BellSouth EDI test environment.
10. Documented process that guides a new CLEC EDI trading partner (i.e., new entrant) through the steps necessary—from initiating the EDI interface development process through to the cutover into a production environment. I.e. an end-to-end view of the EDI interface development/connectivity process.
11. Documented process that guides an existing CLEC EDI trading partner through the necessary steps for a new EDI system release—from connecting to the proposed EDI test environment to developing and testing against the new system release through to the cutover into a production environment. I.e. an end-to-end view of the EDI interface development/connectivity process for a new software release that includes:
    - Intervals.
    - Milestones.
    - Software version control and availability.
    - Testing.
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12. Quality assurance processes BellSouth would employ to ensure the software in the proposed EDI test environment is equally functional and stable to that in the production environment.
13. Documented process for notifying the CLEC community on events regarding the proposed EDI test environment.
14. Process for providing support to a CLEC operating in the proposed EDI test environment, including the ability to report, track, and escalate issues.

Impact

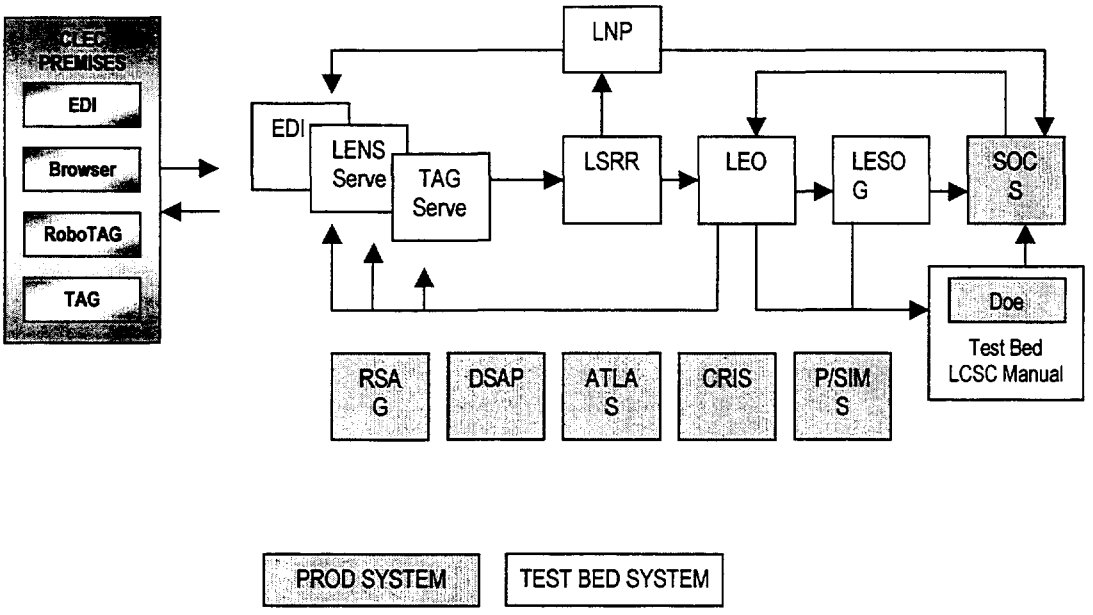
Due to deficiencies in the current EDI test environment, CLECs have difficulty in developing defect free interfaces . This has an impact on a CLECs ability to develop and deliver uninterrupted service to its customers.

FLORIDA OSS BELLSOUTH'S 2ND AMENDED RESPONSE TO EXCEPTION 6

Bell South Response to Amendment

1. Detailed description of the complete functionality and operation of the proposed EDI test environment (down to the computer system level).

CLEC Test



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The test environment will include ENCORE Systems (TAG, LEO, LNP, LESOG, and EDI) that will be duplicated to match the ENCORE production systems. The production legacy reference systems (CRIS, PSIMS, CABS, etc.) will be used in this CLEC test environment.

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- LENS provides both application and presentation (OSI Model) capabilities to TAG for downstream ordering and routing functionalities.

LSRR (Local Service Request Router)- an electronic, traffic routing mechanism

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- LSRR interfaces with LNP, LEO, and OSS platform systems for subsequent order validation and data storage.

LNP (Local Number Portabilility)- A BellSouth maintained electronic database and order generator

- LNP is a server based system
- Provides both data storage and order generation for all LNP orders initiated by trading partners.

LEO- (Local Exchange Order)- A BellSouth maintained electronic database

- LEO is mainframe based
- LEO provides a robust, electronic data storage for all NON-LNP orders initiated by trading partners.
- LEO interfaces with LESOG by sending data to LESOG.

LESOG (Local Exchange Service Order Generator)

- LESOG is server based
- A mechanized process that generates and assembles orders initiated by trading partners
- LESOG interfaces with SOCS by sending data to SOCS

SOCS (Service Order Confirmation System)

- SOCS is a server based

- Provides a mechanism for electronically confirming the status of orders via a "return feed" to the trading partner. The types of "return feeds" include: Pending Order Status, FOC (Firm Order Completions), Notices, clarifications, and jeopardies.

2. Capacity and availability of the proposed EDI test environment.

   Capacity and availability of the test environment is currently under development. These issues will be addressed in a test agreement/plan that is anticipated to be published on or before 15 Mar 00.

3. Computing and network architecture of the proposed EDI test environment.

These applications will be installed onto the following hardware and system platforms:

LENS—3 Sun Solaris Systems (Web Server, Application Server, Database Server)

LENS IOC- 1 Sun Solaris System for a Web Server

LESOG/SOCS2LEO- 1 HP K580-UX System

TAG – 2 HP K580-UX & 2 HP N Class-UX systems

TAG-IOC-2 HP K580-UX systems. This will provide a gateway server for each of the operating environments currently supported.

LNP-2 HP K580-UX & 2 HP N Class UX Systems

LNP-IOC- 2 HP K580-UX systems

LEO-Mainframe control region with two message processing regions

EDI-Mainframe control region with one message processing region.

These systems will be configured as follows:

HP-UX 11 Servers-N4000, 8 CPU, 4GB memory, 2 internal 18GB disks, 2FCAL adapters, 2 100Base T network adapters. This is a rack mountable system and 4 can be put into a 72-inch rack.

HP-UX 10.20 servers- K580, 4CPU, 4GB memory, 2 internal 18 GB disk cards,

Sun Solaris Server- E5500, 8CPU, 4GB memory, 2 internal 18 GB disk cards, 2FCAL adapters, 2 100Base T network adapters. This is a rack-mountable system and 4 can be put into a single 72-inch rack

FLORIDA OSS BELLSOUTH'S 2ND AMENDED RESPONSE TO EXCEPTION 6

4. Standard template or process for developing a CLEC Test Agreement.
   A standard template for a CLEC Test Agreement/Plan is currently in use at BellSouth for both beta and normal CLEC testing across the electronic interfaces.
5. Documented process for developing a CLEC EDI interface test plan.
   A standard template for a CLEC Test Agreement/Plan is currently in use at BellSouth for both beta and normal CLEC testing across the electronic interfaces.
6. CLEC requirements for connecting to the proposed EDI test environment.
   CLEC requirements for connecting to the proposed EDI test environment will be negotiated as part of the CLEC Test Agreement/Plan.
7. Documented process for the creation, use, and modification of BellSouth and CLEC test data. Complete test cases would include expected outputs.
   As part of the CLEC Test Agreement/Plan, CLEC test scenarios are negotiated. The test scenarios may dictate use of BellSouth and/or CLEC test data. This determination is a part of the process for final negotiation of the CLEC Test Agreement/Plan.
8. Detailed flow of events for submitted test transactions, including the types of messaging (automated and manual) that will be exchanged between the CLEC EDI interface and the proposed BellSouth EDI test environment.
   The flow of events for test transactions will be automated and will mimic the production environment with respect to the sending of 850/860s and the return of 855/865s. Functional Acknowledgments (997s) will continue to be a required document exchange.
9. Documented process that guides a new CLEC EDI trading partner (i.e., new entrant) through the steps necessary—from initiating the EDI interface development process through to the cutover into a production environment. I.e. an end-to-end view of the EDI interface development/connectivity process.

   This reflects the internal procedures a CLEC must follow before entry into production. These procedures are managed, documented, and enforced by a CLEC(s) account representative.

10. Documented process that guides an existing CLEC EDI trading partner through the necessary steps for a new EDI system release—from connecting to the proposed EDI test environment to developing and testing against the new system release through to the cutover into a production environment. I.e. an end-to-end view of the EDI interface development/connectivity process for a new software release that includes:
    - Intervals.
    - Milestones.
    - Software version control and availability.
    - Testing.
    - Software migration.

FLORIDA OSS BELLSOUTH'S 2ND AMENDED RESPONSE TO EXCEPTION 6

A documented process that will guide the trading partner from the test environment Into production will be addressed in a test agreement/plan that is anticipated to be published on or before 15 Mar 00.

11. Quality assurance processes BellSouth would employ to ensure the software in the proposed EDI test environment is equally functional and stable to that in the production environment.
    An internal quality assurance process is currently under development for the test environment.

12. Documented process for notifying the CLEC community on events regarding the proposed EDI test environment.

    The documented process for notifying CLECs of any events regarding the test environment will be documented and communicated through a "web based" mechanism and/or CLEC inforum process (Change Control).

13. Process for providing support to a CLEC operating in the proposed EDI test environment, including the ability to report, track, and escalate issues.
    The process is negotiated and documented in the CLEC Test Agreement/Plan.

Date: November 3, 2000

EXCEPTION REPORT

An exception has been identified as a result of the test activities associated with the process verification review for Interface Development (PPR 5).

Exception:

BellSouth lacks an appropriate process, methodology and robust test environment for testing of the electronic data interchange (EDI) interface.

Background:

The first step for a CLEC planning to execute transactions on BellSouth's EDI production systems is for the CLEC to develop an EDI software interface. To accomplish this, the CLEC follows BellSouth's EDI interface development process which includes acquiring specifications and following a test plan that will lead to certified connectivity with BellSouth's EDI production systems. Once certified, the CLEC can execute customer transactions with BellSouth.

To facilitate market entry by a CLEC, BellSouth should make available a robust test environment for the EDI interface.

Issue:

CLECs that seek to test the EDI machine to machine interface during the establishment of system connectivity do not have an adequate test environment available.

BellSouth's current EDI test environment does not offer the functionality to enable a CLEC to thoroughly test its EDI interface prior to connecting to BellSouth's production systems. Some of the elements KPMG Consulting would expect BellSouth's EDI test environment and test processes to include are:

- Ability for a CLEC to create valid electronic test transactions that will process completely through BellSouth's ordering, billing and provisioning systems. In BellSouth's existing process, when a CLEC sends test transactions to BellSouth's test environment the transactions are not processed by either billing or provisioning systems. The only system generated confirmation is a Firm Order Confirmation (FOC), which indicates simply that an order was received and processed through the ordering system. The CLEC is not notified of the test transaction's success or failure by BellSouth's EDI systems directly. In a production environment, a Billing Completion Notice [BCN] and Provisioning Completion Notice [PCN] are system generated upon successful processing.

Current BellSouth testing methodology does not allow a CLEC to ensure that the test transactions generated by a CLECs EDI system can be processed end-to-end by BellSouth systems successfully upon reaching the production environment.

- BellSouth test cases with expected input and output data that will facilitate the CLEC's ability to validate a developed EDI interface before and after connecting to BellSouth's test or production environment. All BellSouth test cases should be of sufficient breadth and depth to allow a CLEC to robustly and thoroughly test all facets of its EDI interface to ensure it has met BellSouth specifications.

- Consistent and documented process for creation of CLEC specific test cases. A CLEC should have the ability to develop an overall test approach or plan that is consistent with its intended business model.

- Documented test processes and expected timelines. A CLEC should have access to information outlining the entire process prior to commencing development for business planning purposes.

- CLECs that have already entered the market require consistent and documented processes, timelines, and a test environment that will permit them to test new changes or releases prior to their introduction into the production environment. As changes are made to BellSouth's EDI systems (e.g., software, specifications, business rules, etc.) that require a CLEC to upgrade its own EDI interface to continue to be able to conduct transactions, the test environment should be updated in a controlled fashion that will permit a CLEC to test these system changes before they are used with live data or on production systems. The CLEC should be provided with reasonable notification.

Amendment—In response to the BellSouth request for more detail regarding the proposed EDI test environment, KPMG Consulting agreed to develop a more detailed description of the types of elements typically found in the test environment. KPMG Consulting would expect, at a minimum, the following elements to be included in a comprehensive EDI test environment:

1. Detailed description of the complete functionality and operation of the proposed EDI test environment (down to the computer system level).
2. Capacity and availability of the proposed EDI test environment.
3. Computing and network architecture of the proposed EDI test environment.
4. Types and version of software to be used in the proposed EDI test environment.
5. Standard template or process for developing a CLEC Test Agreement.
6. Documented process for developing a CLEC EDI interface test plan.
7. CLEC requirements for connecting to the proposed EDI test environment.

8. Documented process for the creation, use, and modification of BellSouth and CLEC test data. Complete test cases would include expected outputs.
9. Detailed flow of events for submitted test transactions, including the types of messaging (automated and manual) that will be exchanged between the CLEC EDI interface and the proposed BellSouth EDI test environment.
10. Documented process that guides a new CLEC EDI trading partner (i.e., new entrant) through the steps necessary—from initiating the EDI interface development process through to the cutover into a production environment. I.e. an end-to-end view of the EDI interface development/connectivity process.
11. Documented process that guides an existing CLEC EDI trading partner through the necessary steps for a new EDI system release—from connecting to the proposed EDI test environment to developing and testing against the new system release through to the cutover into a production environment. I.e. an end-to-end view of the EDI interface development/connectivity process for a new software release that includes:
    - Intervals.
    - Milestones.
    - Software version control and availability.
    - Testing.
    - Software migration.
12. Quality assurance processes BellSouth would employ to ensure the software in the proposed EDI test environment is equally functional and stable to that in the production environment.
13. Documented process for notifying the CLEC community on events regarding the proposed EDI test environment.
14. Process for providing support to a CLEC operating in the proposed EDI test environment, including the ability to report, track, and escalate issues.

Impact

Due to deficiencies in the current EDI test environment, CLECs have difficulty in developing defect free interfaces . This has an impact on a CLECs ability to develop and deliver uninterrupted service to its customers.